WASHINGTON HIGHER EDUCATION COORDINATING BOARD

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The Role of Transfer in the Attainment of Bachelor's Degrees at Washington Public Baccalaureate Institutions, Class of 2006

Executive Summary

Background

The *Role of Transfer* study is an update to a previous study on the graduating class of 2001 completed by the State Board for Community and Technical Colleges (SBCTC).[1] The current study focused on similar questions for 19,272 students who earned their first bachelor's degree as graduates of the Class of 2006, of which 7,278 were community and technical college transfer students to the public baccalaureate institutions.

The Higher Education Coordinating Board (HECB) contracted with the Washington State University Social and Economic Sciences Research Center (SESRC) to complete the study. A technical workgroup of research and admissions specialists at Washington's public colleges and universities and representatives of private four-year institutions advised the HECB and SESRC during the study. The report focuses exclusively on Washington's public baccalaureate universities.

The public two-year and four-year colleges pooled student data from two sources:

- Public Centralized Higher Education Enrollment System (PCHEES) student files maintained by the Office of Financial Management (OFM)
- State Board for Community and Technical College (SBCTC) data warehouse files for the graduates identified by PCHEES

The study examines the graduating class of the public baccalaureates in 2005-06 (by gender, ethnicity, age, major, and institution type). Specifically, the study examines graduates by:

1. Campus type - What was the make-up of graduates at main campuses, branch campuses, and centers?
2. Transfer status - How many baccalaureate graduates entered four-year colleges directly as freshmen? How many transferred from a community or technical college? How many came through other paths?
3. Pre-college enrollments - How many of the graduates who came through the community and technical college system took pre-college math or English courses?
4. Two-year degrees - Among students who transferred from a community or technical college, how many earned degrees, and what kind of degree did they earn?

[1] The prior study can be found at: www.sbctc.ctc.edu/docs/data/research_reports/transfer/2003june_role_of_transfer.doc

Limitations of the Data

This project was the first attempt to use the newly expanded PCHEES data set for detailed ad hoc analysis. This report was limited by several data challenges in using the PCHEES extracts, which are discussed at length in Appendix 5 of the actual report. Some of these problems should diminish as the PCHEES process becomes regularized. Others may be inherent limitations of the current database design.

Limitations occurred because some variables were not available in the developing database and some data were missing. The current data extract, for example, used "attempted credits" rather than "credits earned" because the researchers did not have course completions available at the time the data was drawn for the study. Even with the addition of "credits earned" data after this study was conducted, the data do not go back to prior years, presenting a challenge for longitudinal analysis. Missing data was also a problem for a number of data elements, in particular transfer credit counts.

Selected Findings

1. Characteristics of public baccalaureate degree graduates by campus type

- The overall number of degrees rose 15 percent from 16,823 in 2001 to 19,272 in 2006. The largest increases were at centers (69 percent) and branch campuses (41 percent).
- Research universities granted 48 percent of all degrees (9,292 degrees) in 2006, followed by 35 percent at regional-comprehensives (n = 6,726).
- Branch campuses awarded 10 percent of all degrees (1,933) and centers awarded 7 percent (1,321 degrees).

2. Characteristics of transfer students

- More than half (53 percent) of the Class of 2006 were transfer students.
    - 7278 community and technical college transfers
    - 2799 "other" transfers
- Older students were more likely to enter a university through transfer; only 22 percent of 25-29 year olds (745 students) and just 12 percent of graduates over 30 (330 students) were direct entry students.
- Community and technical college transfers were well represented in all majors, ranging from 32 percent in STEM (1,067 students) to 50 percent in education (526 students).
- At least 71 percent of students at branch campuses (1,379 students) and 67 percent at centers (882 students) were community and technical college transfers.
- The proportion of graduates by campus who are transfer students has remained relatively constant over the past five years.
    - At the main campuses, half of each class was direct entry, and community and technical college transfers were one-third of each graduating class.
    - At centers and branches, community and technical college transfers comprised over two-thirds of all graduates.

3. Pre-college enrollments
    - More than 4,500 students successfully completed remedial coursework at a community and technical college in English or math and progressed to a bachelor's degree (23 percent of all graduates).
    - For pre-college math, the percentage of students enrolled increased by age.
    - 35 percent of STEM graduates (*n*=232) and 50 percent of business graduates (*n*=505) took pre-college math.
    - Students at centers had the highest enrollment rates in both pre-college English (25 percent) and pre-college math (71 percent), and research universities had the lowest of both (19 and 44 percent).

4. Two-year degrees
    - The Direct Transfer Agreement (DTA) or the Major Related Pathways (MRP) in Business was the normal path to transfer chosen by 76 percent of community and technical college transfer baccalaureate graduates (5,542 students). The newer statewide agreement for transfer to engineering, chemistry, and physics – the Associate of Science-Technology (AS-T) - was completed by 3 percent of transfers (235 students). Four-hundred and thirty-two transfers completed a technical degree (6 percent).
    - Overall, 86 percent of community and technical college transfers completed an associate degree (6,273), 12 percent higher than the Class of 2001 (74 percent).
    - African American and Native American students were more likely than other groups to earn technical degrees.
    - Asian American students were more likely to complete an Associate in Science Track 2.
    - Men and women pursued different types of degrees.
        - 270 women with a technical degree transferred and completed a bachelor's degree (67 percent of technical degree transfers).
        - 174 men transferred with the AST degree and completed a bachelor's degree (75 percent of AST transfers)
    - 3,443 community and technical college transfer graduates were over 25 years old (47 percent).
        - The Associate in Arts DTA and technical degrees were more common for older graduates.
        - The Associate in Science Track 2 (engineering/physics) were more common among the younger graduate transfers.
    - Graduates who completed associate degrees targeted to specific majors were very likely to complete a bachelor's degree in a related field.
        - 48 out of 53 students completing the Business DTA/MRP earned a bachelor's degree in business.
        - 145 out of 152 students completing an Associate in Science Track 2 (engineering/physics) completed a bachelor's degree in a STEM-related major.
        - 68 out of 83 students earning an Associate in Science Track 1 (biology/chemistry) majored in either STEM or health.

- Students earning AS-T Track 1 (biology/chemistry) and Track 2 (engineering/physics) degrees were much more likely to enroll at research universities (67 percent and 77 percent respectively) than students earning other degrees.
- Graduates earning Business DTA/MRP or Associate in Science Track 1 or Track 2 degrees took fewer credits than those who did not use these specialized tracks.

Next Steps

A goal of this study was to identify key indicators and track them over time. This project was the first attempt to use the newly expanded PCHEES data set for detailed ad hoc analysis. Limitations of the data encountered in this study should diminish with planned improvements in the PCHEES data set and continued collaboration with the Education Research and Data Center (ERDC).

Both two- and four-year institutions in Washington have shown an interest in using data to improve student transfer within our system to meet *Master Plan* goals for degree production. *The Role of Transfer Study* is an important tool in tracking transfer student progress on a number of initiatives and should be completed on a regular schedule in the future.

The HECB currently has a legislative requirement "to submit a progress report on the development of transfer associate degrees to the higher education committees of the House of Representatives and Senate each odd-numbered year." Another report conducted by HECB staff, "*The Transfer and Articulation Report*," describes progress on transfer indicators, monitors development of additional transfer associate degrees, and provides other data on improvements in transfer efficiency. Over the next year, as we develop the next transfer and articulation report, we will evaluate whether it would be more appropriate to integrate *The Role of Transfer in the Bachelor's Degree Study* into the *Transfer and Articulation Report*, or complete the report as a companion in even-numbered years.

Staff will also work on identifying a core of questions to conduct longitudinal research to track the progress of transfer students over time and measure system improvements. Additional research questions will be added as the ERDC database improvements occur to capture the extent of "swirling" (attending more than two institutions) and horizontal and reverse transfer patterns. In addition, problems in this particular research study in correctly capturing race/ethnicity, "credits earned" by transfer students, and other important variables will be addressed so that future studies provide us with even better information to help transfer students succeed.